ABSTRACT

New solid drug dispersions are described in which [[the]] a drug is present in amorphous form and ~~massively~~ dispersed ~~(in bulk) inside~~ within the particles of an organic carrier selected from cross-linked polymers and/or [[a]] complexing agents. These dispersions are obtainable by mixing ~~together~~ the drug and the carrier and applying an oscillating electromagnetic field in the microwave region ~~to the mixture, to a frequency belonging to the microwave region; the microwaves are applied~~ according to a specific heating cycle wherein the drug-carrier mixture is heated at a temperature higher than the melting point of the drug for at least 5 minutes. ~~With respect to the known techniques, the present invention allows to increase in the amount of drug incorporated into the carrier in amorphous form, and to increase the physical stability of the amorphous phase. This is particularly useful in the preparation of pharmaceutical compositions based on drugs which are crystalline in nature, such as are notoriously sparingly soluble in water: thanks to the increased amounts and stability of the drug in amorphous form, the resulting formulations have a more rapid and intense effect, and are endowed with greater bioavailability~~.

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100